

INTERIOR LIVE OAK

Quercus wislizeni A. DC.

Plant Symbol = QUWI2

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Alternate Names

Quercus parvula, *Quercus shrevei*, dwarf interior live oak, scrub interior live oak, Highland live oak, Sierra live oak

Uses

Wildlife: Interior live oak provides important food and cover for a wide variety of birds and mammals: black-tailed jackrabbit, Audubon cottontail, brush rabbit, Beechy ground squirrel, Sonoma chipmunk, beaver, porcupine, and elk. It is important for winter browse by Columbian black-tailed deer. Acorns are a valuable food source for deer and other wild ungulates, birds, and small mammals in the fall.

Ethnobotanic: After leaching away the bitter tannins, Native Americans used the acorns of many oaks (*Quercus* spp.) for cooking oils, soups, stews, or breads. Interior live oak has a high value for fuel wood and is also used for landscaping.

Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status (e.g. threatened or endangered species, state noxious status, and wetland indicator values).

Description

Interior live oak is a slow-growing, variable evergreen that grows as a large shrub or small tree. Plants may reach 30 to 75 feet in height or assume a shrub-like growth form with heights of only 8 to 10 feet. Leaves, which persist for 2 years, are mostly oblong-to-elliptic or lanceolate, and spiny-toothed to entire around the edges. Both leaf surfaces are shiny green but the upper surface is darker. Interior live oak is monoecious (both male and female flowers borne on the same plant). Male flowers are borne in catkins 1 to 3 inches in length, and female flowers grow in clusters of two to four in the upper leaf axils.

Adaptation and Distribution

Interior live oak is native to California and Mexico. It occurs from northern California in Siskiyou and Shasta counties, south along the foothills of the Sierra Nevada and inner Coast Ranges, plus the Channel islands. It is adapted to the following zones in California: Douglas-fir, Ponderosa pine, lodgepole pine, redwood, western hardwoods, and chaparral - mountain shrub.

This species is generally found on soils with a pH range between 5.6 and 7.5, with depths of 20 to 40 inches. Interior live oak grows particularly well on dry, shallow, well-drained loams, clay loams, gravelly loams, or gravel. Interior live oak is tolerant of shade, particularly when young. Interior live oak appears to be well-adapted to persist with or without fire. For more information, consult the US Forest Service Fire Effects Information System on the web.

For a current distribution map, please consult the Plant Profile page for this species on the PLANTS Web site.

Establishment

Interior live oak regenerates vegetatively after disturbance and also reproduces through seed. Cleaned acorns average approximately 125 per pound (275/kg). Annual seed production appears to be somewhat variable, although each interior live oak tree generally produces good seed crops at 5- to 7-year intervals. Acorns generally ripen after mid-August. Research indicates that the acorns of interior live oak can germinate without exposure to low temperatures. However, exposure to temperatures of

32 to 41° F can effectively stratify seed and enhance germination.

Management

Interior live oak sprouts vigorously after fire or mechanical disturbance.

Cultivars, Improved, and Selected Materials (and area of origin)

No cultivars currently exist, but ecotypes are available, particularly from nurseries specializing in native plants within California.

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For more information about this and other plants, please contact your local NRCS field office or Conservation District, and visit the PLANTS Web site <<http://plants.usda.gov>> or the Plant Materials Program Web site <<http://Plant-Materials.nrcs.usda.gov>>

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